

ABSTRACT OF THE DISCLOSURE

Integrity of data is to be ensured in a simple manner. A data verifier generates a signature generation request from data to be signed and signature request time, and sends the request to a data generator. The data generator extracts the data to be signed from the signature generation request, and its signature generation unit generates a signature for the data. A key generation unit generates a key from a previous key, the signature request time in the signature generation request, and the identifier of the data generator , and an encryptor encrypts the signature. After that, the encrypted signature and the like are returned to the data verifier, which generates a decrypting key with a key generation unit from the previous key, the signature request time, and the identifier of the data generator, then extracts an encrypted signature, and decrypts it with a decryptor. A signature verification unit checks whether or not the result of decrypting is the correct signature.